

AMENDMENTS IN THE CLAIMS

1. (currently amended) A system for periodically moving information units from a plurality of sources to an output destination based on information stored about each of the plurality of sources, the system comprising:

a time-based calendar which handles some of the information units based on the information stored about the plurality of sources;

a time-independent calendar which handles others of the information units based on information stored about the plurality of sources and which places each source into a calendar location and which moves the source to a different place in the calendar after servicing the source; and

a mechanism for determining when a flow is added to the source whether that source was at a location in the time-based calendar and preventing the source from being placed at a location ahead of a calculated location in the time-based calendar and placing the source at a second location that is the calculated location or a next location that is after the calculated location within the time-based calendar.

2. (previously presented) A method of servicing data flows placed into a queue for service in turn comprising:

determining whether a queue had a previous position in a calendar;

if the queue had a previous position in the calendar, determining whether a new position which would be assigned to it is earlier than a previously calculated new position in the calendar;

if the new position which would be assigned is earlier than the previously calculated new position, using the previously calculated new position;

and, if the previously calculated new position is not earlier than the position which would be assigned, using the position which would be assigned.

3. (previously presented) A method including Claim 2 and further including considering the aging of the queue to determine whether stored parameters remain valid.

4. (canceled)

5. (previously presented) The system of claim 1 wherein the plurality of sources include a plurality of queues.
6. (previously presented) The system of claim 1 or claim 5 wherein the calculated location includes the location whereat the queue would have been attached upstream from the location whereat said queue was last serviced.
7. (previously presented) The method of claim 2 wherein using includes attaching the queue to the selected location.
8. (previously presented) The method of claim 6 wherein the stored information includes time stamps.
9. (currently amended) A system comprising:  
a time-based calendar which handles some of a plurality of information units based on the information stored about a plurality of sources; and  
a mechanism for determining when a flow is added to a source whether that source was at a location in the time-based calendar and preventing the source from being placed at a location ahead of a predefined location in the time-based calendar and placing the source at a second location that is the calculated location or a next location that is after the calculated location within the time-based calendar.
10. (currently amended) A method comprising:  
providing at least one time based calendar having a plurality of locations and a time pointer moving relative to the plurality of locations as a result of scheduler ticks;  
attaching a queue to a first calendar location whereat the time pointer is pointing;  
servicing said queue by causing a frame to be transmitted from said queue whereupon said queue goes empty;  
identifying a second location whereat the queue would have been re-attached had it not gone empty;  
examining pre-defined characteristics associated with said queue to determine occupancy frames within said queue;

if examination indicates the queue is not empty, identifying a current location whereat the time pointer points;

correlating the current location of the time pointer and the second location; and

selecting a location which is not earlier than the second location to re-attach the queue.

11. (previously presented) The method of claim 10 wherein the not emptied queue is attached to the selected location.

12. (previously presented) The method of claims 10 or 11 wherein the queue is attached by writing the i.d. (Identification number) of said queue in a stack located at each location.

13. (previously presented) The method of claim 12 wherein the stack is a Last In First Out (LIFO) stack.